Health Research in Action: Towards a Provincial Capacity-Building Framework

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Building a healthy Saskatchewan through health research

Saskatchewan Health Research FOUNDATION

About SHRF

The Saskatchewan Health Research Foundation (SHRF) is the provincial agency responsible for funding, facilitating and promoting health research in Saskatchewan. This includes leading the implementation of Saskatchewan's *Health Research Strategy* (2004).

For details about SHRF's mandate, activities, board and staff, and the provincial *Health Research Strategy,* please visit our Web site.

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Health research making a difference

Saskatchewan's *Health Research Strategy* (2004) is a long-term vision for health research that includes a strong emphasis on ensuring that research leads to improved health and health care. This involves a process known as knowledge translation, a process known by many names, which are often debated. What is not debatable is its importance. Ensuring that research is generated, shared and used to produce benefits for health, the health system and society is critical. This is true for Saskatchewan, but it's of course also true nationally and internationally.

This is no doubt why the theme emerged so prominently from research and consultations that led to the provincial *Health Research Strategy*. The wide consultation included individuals, organizations and communities in Saskatchewan, such as the universities, the health system, community-based organizations, charitable agencies, civic leaders and business leaders. From that input, four major themes evolved: advancing priority health research areas; applying what we learn, or knowledge translation; building health research capacity; and tracking progress and impact. Knowledge translation is listed as a separate theme but it is actually an integral part of all the priority areas and overall capacity building. (The full Strategy is available at www.shrf.ca).

Knowledge translation is important for the province to improve health outcomes, the health system, research-based decisions and economic outcomes.

While the Saskatchewan Health Research Foundation (SHRF) is responsible for leading the Strategy's implementation, its success depends on the commitment and collaboration of individuals and agencies throughout the province. To facilitate action on the knowledge translation theme, ***SHRF is leading the development of a provincial framework, or action plan, to increase knowledge translation capacity.*** We are doing this in collaboration with the universities, the Health Quality Council and other key organizations that are part of an advisory committee to guide our work in this area.

The framework will lay the foundation for improving access to and use of international and national health research, as well as research produced in Saskatchewan. We are using this paper to outline our view of knowledge translation, discuss some key issues related to the topic, identify the steps we are taking to develop the framework and pose some questions we need to consider about the strengths, gaps and strategies in this area. This will assist in developing future directions and priorities for increasing knowledge translation capacity in Saskatchewan.

What's happening in the province and beyond?

Saskatchewan is not alone in facing the challenge of knowledge translation. Nationally, the Commission on the Future of Health Care in Canada (2002) recommended stronger attention to applying research knowledge, particularly in certain pressing health areas. The Canadian Institutes of Health Research and the Canadian Health Services Research Foundation, both major national research agencies, have been developing and defining this area and are funding research in the field. Internationally, the Global Forum for Health Research has also highlighted the importance of research use.

Agencies in other provinces, like the Alberta Heritage Foundation for Medical Research (AHFMR), the Nova Scotia Health Research Foundation, and the Michael Smith Foundation for Health Research, similar in mandate to SHRF, are also working on knowledge translation. For example, AHFMR broke ground in the 1990s with its SEARCH program, which stands for Swift Efficient Application of Research in Community Health. The program trains front-line health professionals to do and apply health research in their daily practice.

We have Saskatchewan strengths on which to build as well. These include a history of encouraging research-based decision-making in health, formerly with the Health Services Utilization and Research Commission and now the Health Quality Council devoted to this task. Regional health authorities and the provincial health department are also keen to advance this work.

The province's universities play a key role in producing and sharing research with various communities. A few of the many examples include: Industry Liaison Offices working with researchers and businesses to facilitate the commercialization of research; the Community-University Institute for Social Research working with communities to facilitate relevant and useful community research; and the Indigenous Peoples' Health Research Centre playing a lead role in advancing Indigenous knowledge, looking at how knowledge is defined and shared in unique ways in the Indigenous community.

There are many strengths in Saskatchewan and Canada for facilitating knowledge translation.

Participants at SHRF's Health Research Summit in 2004 also identified several strengths to build on here: Saskatchewan has a strong sense of community; we are a province that makes good use of partnerships and collaborations; there is keen interest in health and health research; we see ourselves as leaders in improving the health service system; and we have top-notch researchers in the province.

What do we mean by "knowledge translation"?

How do we ensure that the knowledge gained from health research is used to the fullest?

What are the best mechanisms for sharing research results with the general public, health care providers, health policy makers, commercial enterprises and other researchers who would benefit from this work?

How can we ensure researchers are aware of the research needs of these users so they can respond to emerging issues and priorities?

(Source: Health Research Strategy, 2004)

There is a growing effort across Canada to answer these challenging questions, so that the knowledge acquired through research generates the greatest benefit for health, the health care system and the economy. The *Health Research Strategy* specifically calls for a provincial capacity-building framework for knowledge translation related to health research, broadly defined. Although that's easy enough to state, there is a great deal of complexity attached to sharing and using health research.

Some organizations and individuals might be cautious about knowledge translation related to research because it can be seen as an intention to replace all forms of knowledge with research knowledge. There are many other kinds of knowledge and there are organizations and individuals working on knowledge translation in those areas. We don't see research knowledge as a replacement but one very important resource.

We know that research is not produced in a vacuum and it's not used in one either. Organizations and individuals often make decisions in a complex environment where the latest research is just one of many factors that contribute to decision-making. In addition, the relevance of research to decisions under consideration might not be obvious. Researchers are also navigating their own complex systems that don't always recognize or reward knowledge translation activities.

The Canadian Institutes of Health Research (CIHR), Canada's primary health research funding agency, developed a definition of knowledge translation through extensive research and consultation. CIHR's (2005) definition captures our general understanding of knowledge translation and its complexity:

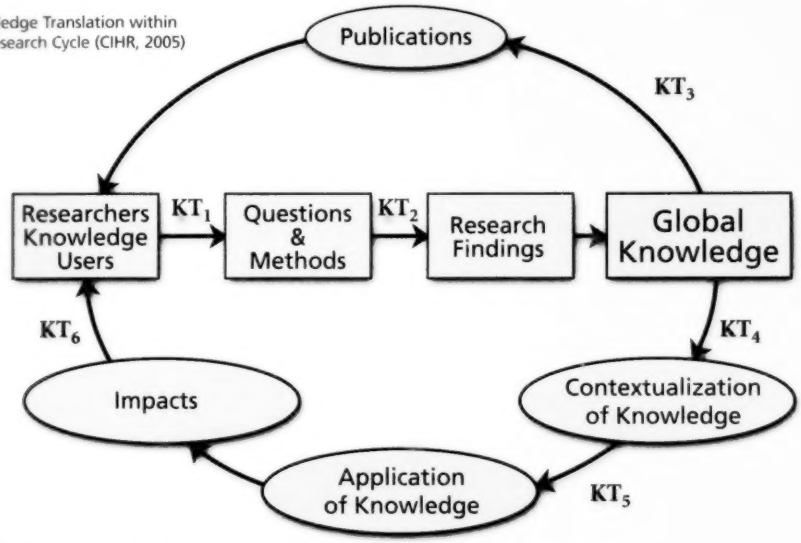
the exchange, synthesis and ethically sound application of researcher findings - within a complex system of relationships among researchers and knowledge users - to accelerate the capture of the benefits of research for Canadians through improved health, more effective services and products, and a strengthened health care system.

Knowledge translation is not a one-time event or a one-way process (Rich, 1991; 1997). It involves interaction and complex exchanges (Lomas, 1997; Stone, Maxwell & Keating, 2001). In other words, effective knowledge translation cannot occur without healthy relationships involving research organizations, universities, governments, regional health authorities, community-based organizations, business enterprises and funders.

Knowledge translation processes and pathways

CIHR developed a model (Figure 1) to illustrate knowledge translation processes and pathways related to research. This model is our starting point. It isn't an answer or a solution but is one way to visualize knowledge translation within the research cycle. As you look at the model, it's important to keep in mind that each knowledge translation opportunity involves some interaction. For example, questions and methods are not necessarily researcher-driven but may be influenced by community needs or political decisions.

Figure 1: Knowledge Translation within the Research Cycle (CIHR, 2005)



KT1: defining research questions and methodologies
KT2: conducting research (as in the case of participatory research)
KT3: publishing research findings in plain language and accessible formats
KT4: placing research findings into the context of other knowledge and socio-cultural norms
KT5: making decisions and taking action informed by research findings
KT6: influencing subsequent rounds of research based on the impacts of knowledge use

We can think about knowledge translation as potentially occurring at various stages of research through exchange and interaction:

- research development or synthesis that is relevant and useful to the community;
- research dissemination that reaches the most appropriate audience at the most appropriate time in the most appropriate format;
- research use by health care providers, health policy makers, commercial enterprises, researchers and the general population.

Further, knowledge translation is very complex because its pathways and processes vary for different types of research and for different contexts. For example, in population health research, the end goal is often social policy change; in clinical research, it may be deciding whether one treatment works better than another; in biomedical science, it is likely the development of a new medicine or device; and in health services research, it is usually procedural change for improving service quality. Some research knowledge is, of course, "closer"

to the application end of the spectrum than are others, which might be more basic and fundamental, with more time needed to produce useable or commercializable results.

Knowledge translation also varies according to agencies' roles, capabilities and resources. For example, in research agencies the goal is often to produce high-quality research or to strategically fund and produce relevant and timely research; in health authorities or other provincial agencies, research use likely relates to the adoption of best practices and making informed decisions that ensure an efficient and effective health system; in biotechnology and commercial organizations, knowledge translation is related to producing better products and economic benefits; charitable and community agencies look to research for improved client support and education. Furthermore, what is a benefit for one sector may in fact be a cost to another. Interwoven with all of these are the needs and considerations related to different cultures and values. Indeed, it is a complex system.

Expectations and timelines are fundamental to understanding the knowledge translation process. There is sometimes an expectation that each and every study should lead to immediate benefit. In reality, research studies generally contribute to building or confirming knowledge, and the timelines may be long between findings and application - in some instances, decades. That's why researchers' traditional approaches of publishing and conference attendance remain critically important to knowledge translation. They build knowledge for future advancements and ensure that the knowledge is in the public domain, available and accessible for addressing challenging health issues. From a more applied perspective, institutions interested in adopting best practices or developing new services and products usually need to invest in personnel who can find, interpret and synthesize research to produce effective and innovative solutions.

Knowledge translation applies to many agencies and individuals in the province in different and complex ways.

Given the differences in kinds of health research and the ways that different agencies and individuals make use of health research, knowledge translation can mean many things to many people, each equally valid and important. We already know that different people access and use health research differently, depending on who they are and where they are in the health system. What we need to know is how we can ***improve*** access to and use of health research in different areas.

People rely on various mechanisms to assist knowledge translation. Some examples are listed below.

- list serves and Web sites
- participatory research methods
- community ownership and input
- audience-specific research summaries
- systematic reviews
- patents and copyrights
- special positions like "knowledge brokers," liaison positions and consultants
- tools (software) for users to better access research
- published policy papers
- peer-reviewed journal publications
- education and training
- media, marketing and communication

Developing the framework

The steps SHRF is taking to develop a provincial knowledge translation capacity-building framework include: background research, focus groups to gather input, a provincial summit to build consensus and broad sharing of the results. This is occurring with the advice of an advisory committee with critical expertise and experience.

The committee represents the diverse population in Saskatchewan, as well as the broad spectrum of health: people from rural and urban communities; the province's universities; charitable organizations; commercialization and biotechnology industry; the Health Quality Council; the Indigenous Peoples' Health Research Centre; several health regions; and the Saskatchewan government. We are also seeking consultation from outside the province. Table 1 below outlines the steps and actions in our process, designed to be as consultative as possible.

The framework will include short- and long-term actions designed to help ensure that Saskatchewan has strong capacity to generate, share and use research results to improve health and the health care system in the province. As part of the framework, SHRF will consider the following points related to knowledge translation as outlined in the *Health Research Strategy*:

- needs and responsibilities of individuals and agencies, the provincial government and regional health authorities;
- roles of various research agencies (including SHRF and the universities);
- structures by which stronger relationships can be developed among researchers, research funders, research users and the public to identify and address research needs and ensure the application of research discoveries; and
- relevant mechanisms for knowledge translation in specific communities.

Table 1: Knowledge Translation Project Steps and Action

Steps	Actions
Background research and preparation Sept 05 - March 06	1) Produce a discussion paper outlining relevant issues and key questions.
	2) Form a provincial advisory committee to guide the process.
Gather and analyze data Apr 06 - Aug 06	3) Hold focus groups to identify needs and responsibilities in knowledge translation, looking at both strengths to build on and gaps that need to be addressed.
Develop framework Sept 06 - Dec 06	4) Develop framework based on provincial focus groups and guidance of the advisory committee.
Verify draft framework Jan 07	5) Verify framework at a provincial summit; finalize framework and release broadly to stakeholders and participants.

Provincial consultation

At the end of this document you will find the questions we will be considering at focus groups being held in many parts of the province. Ideally, these groups will reflect the complex geography and cultural diversity of the province and the health system.

We want to learn what different agencies' unique issues are in using research knowledge, what their needs are, what their responsibilities are and what's already working in the province. Our goal is to develop a collaborative action plan for building on existing strengths and addressing critical gaps for building knowledge translation capacity in Saskatchewan.

We are consulting with as many people as possible who contribute to the health and well-being of the province. This includes health care providers, health policy makers, business people, the engaged public, researchers and university leaders.

We also recognize that health includes more than clinical or medical definitions. SHRF defines health research broadly, encompassing biomedical sciences, clinical research, health services and policy research, and population health research. We are consulting with people who represent this diversity as well.

The framework we are developing is meant to provide building blocks for the province so that we can all contribute to the best use of new and existing research in our unique and complex roles in agencies and as individuals.

Expected project outcomes

The main objective is to develop a ***practical*** provincial framework that agencies and individuals can use to create building blocks for knowledge translation. The framework is meant to provide an action plan for building capacity that resonates with a broad range of agencies and individuals.

We would expect individuals and agencies to benefit from the development of this framework by having easier access to relevant research and by having stronger and more relationships with others in the province for sharing and using research. This will, in turn, help to improve health, health care and other social and economic benefits in the province over time.

We hope to discover first of all what people perceive as their challenges, needs, strengths and responsibilities in knowledge translation. We also want to learn about building blocks that could be put in place to facilitate the translation and exchange of knowledge.

We already know that different people and organizations have different roles and responsibilities in knowledge translation. We seek to understand some of the specifics of those roles and responsibilities. We want to know who's doing what in the province and what else needs to be done. We need to know what we have that we can build on and what we need to improve.

We need input

Focus groups

Building this framework is obviously a challenging and important task. To make it happen we need input from many people. We are consulting with a broad range of people across the province. There will be approximately 12 focus groups that pull people together from the sectors listed below and reflect both urban and rural perspectives.

- health policy makers
- health care providers
- researchers in clinical, biomedical, health system or population health
- representatives from businesses and universities involved in commercialization
- the engaged public (volunteers, patients, advocates)
- communications and media
- information technology

Focus group questions

We are asking our focus group participants to share their views about how we can improve access to and use of health research. Specifically, we'd like people to talk about their experiences that give unique insight into:

- existing strengths in putting health research to use;
- examples of success stories in sharing and using research and why they work;
- challenges or gaps that need addressing;
- one or two key actions or strategies that would help increase capacity to use research;
- who should take the lead in those actions or strategies;
- other innovative recommendations you may have about enhancing research use.

If you are reading this paper and not participating in a focus group, but are interested in sharing your views with us, we would be pleased to receive your comments.

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List of Web sites

Alberta Heritage Foundation for Medical Research
www.ahfmr.ab.ca

Canadian Institutes of Health Research
www.cihr-irsc.gc.ca

Canadian Health Services Research Foundation
www.chsrf.ca

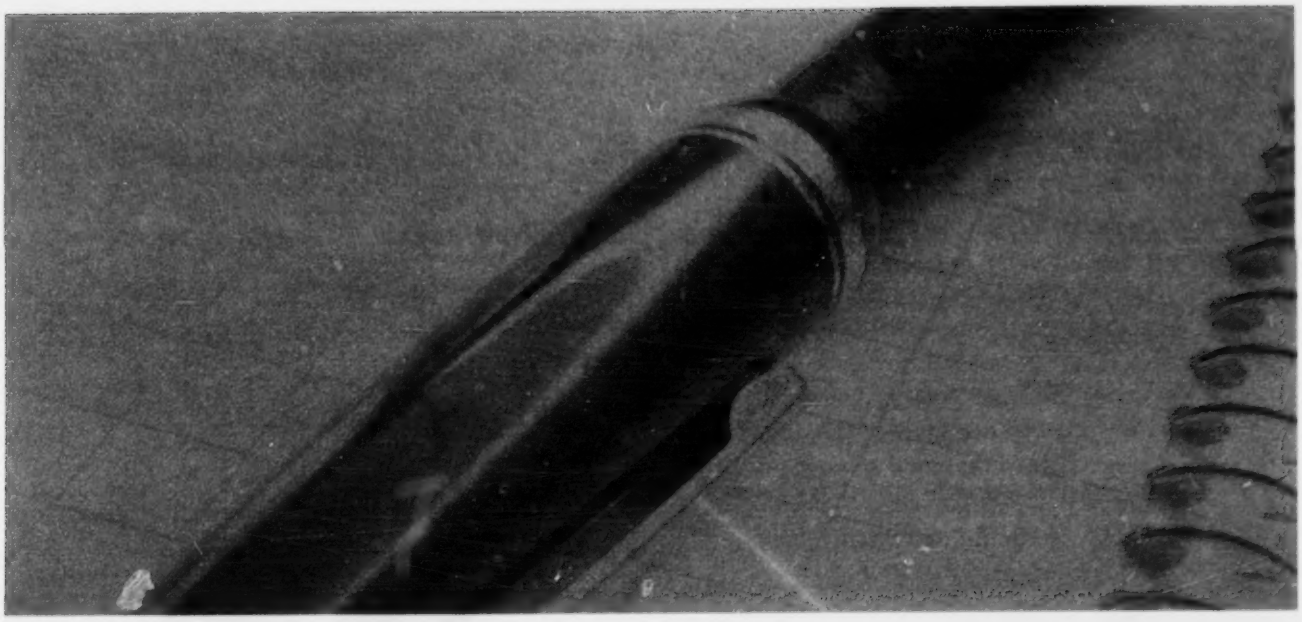
Global Forum for Health Research
www.globalforumhealth.org

Health Quality Council
www.hqc.sk.ca

Indigenous Peoples' Health Research Centre
www.iphrc.ca

Michael Smith Foundation for Health Research
www.msfhr.org

Nova Scotia Health Research Foundation
www.nshrf.ca



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